

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P842386

Luminaire Tested: **ARCH4-40-730-U-5WQ**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P842386  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-40-730-U-5WQ  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 355mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 7502 lumens  
Efficiency: N/A  
Efficacy: 171.3 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type V - Medium  
BUG Rating: B3 - U0 - G1

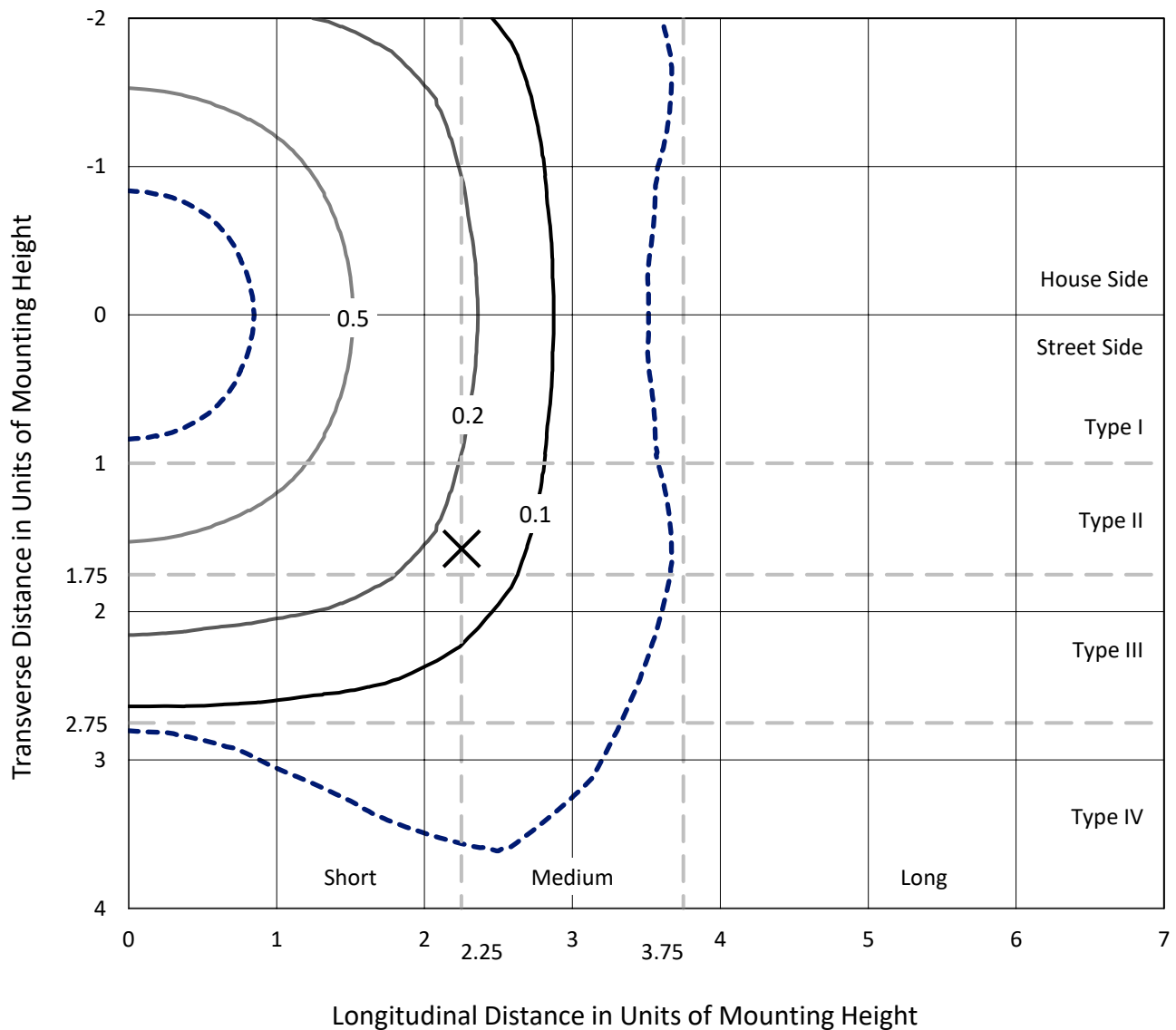
Input Watts (W): 43.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

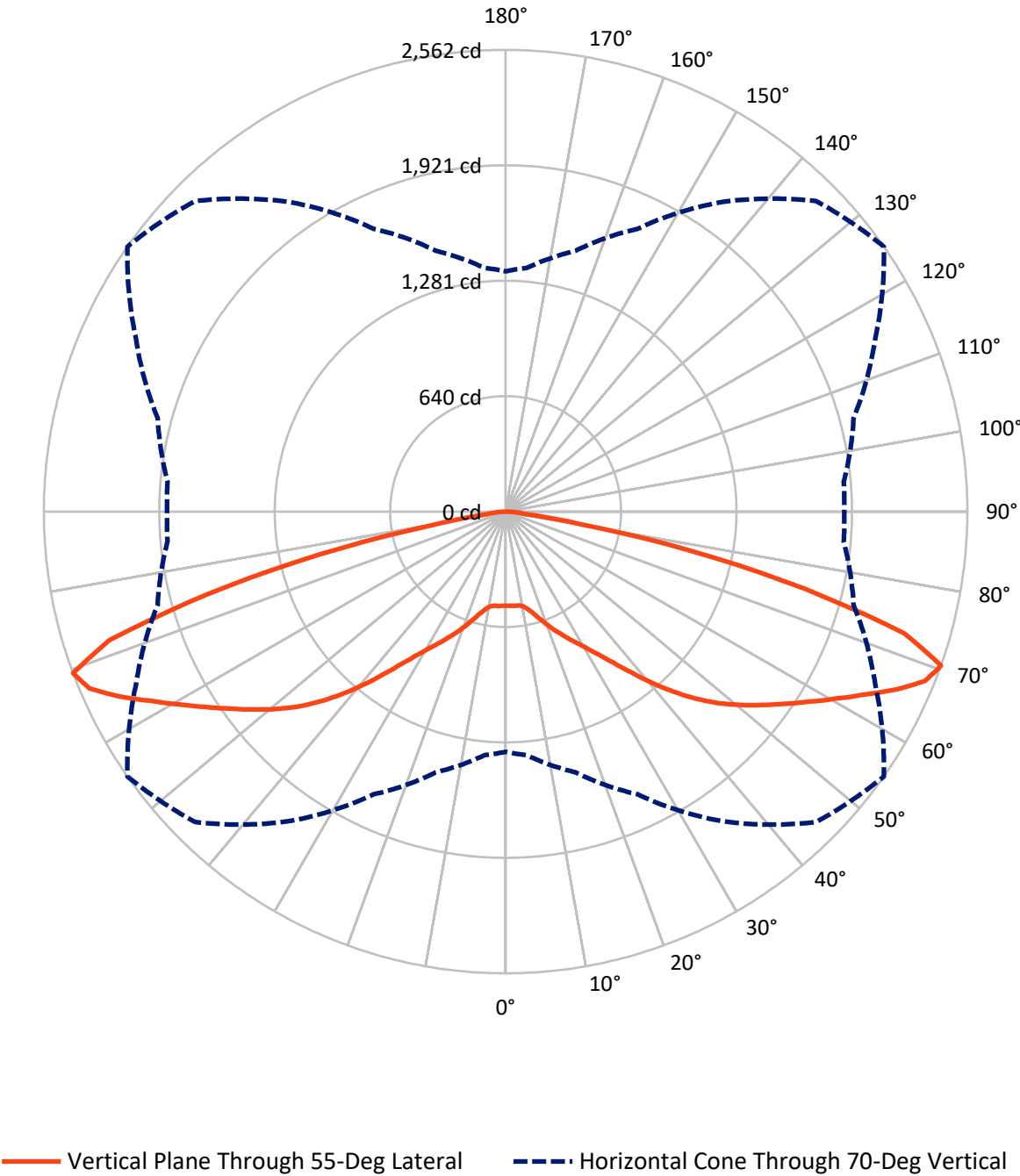
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc  
Type V - Medium - N/A

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Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 3751.0   | 0.0    | 3751.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 3751.0   | 0.0    | 3751.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 7502.0   | 0.0    | 7502.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 50.5   | 0.7       |
| 10°-20°   | 171.8  | 2.3       |
| 20°-30°   | 357.0  | 4.8       |
| 30°-40°   | 659.4  | 8.8       |
| 40°-50°   | 1158.5 | 15.4      |
| 50°-60°   | 1670.8 | 22.3      |
| 60°-70°   | 2044.8 | 27.3      |
| 70°-80°   | 1301.2 | 17.3      |
| 80°-90°   | 88.0   | 1.2       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-90°    | 7502.0 | 100.0     |
| 0°-180°   | 7502.0 | 100.0     |

**Coefficient of Utilization**



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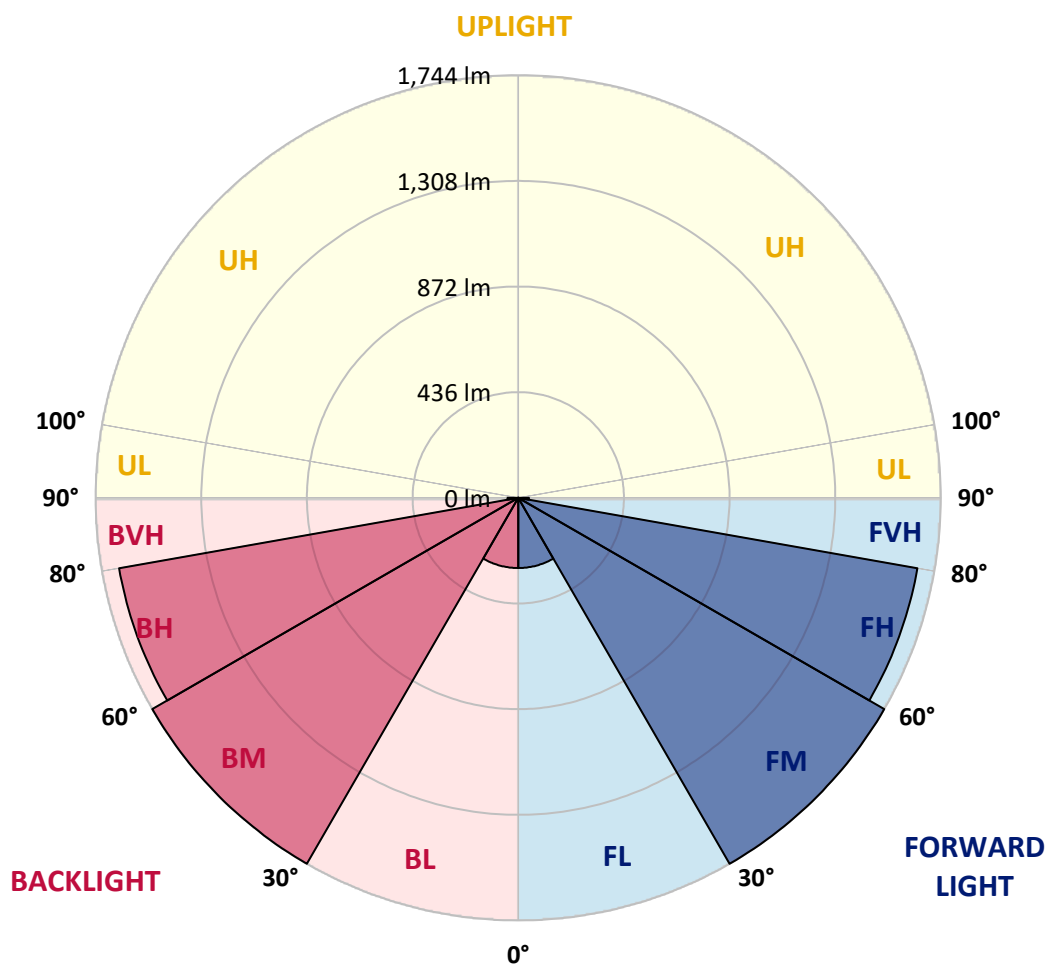
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 289.7  | 3.9       |                         |      |         |
| FM   | (30°-60°)   | 1744.3 | 23.3      |                         |      |         |
| FH   | (60°-80°)   | 1673.0 | 22.3      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 44.0   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 289.7  | 3.9       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1744.3 | 23.3      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1673.0 | 22.3      | B3/2500                 |      | G1/1800 |
| BVH  | (80°-90°)   | 44.0   | 0.6       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G1**

Type V Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 523.0  | 523.0  | 523.0  | 523.0  | 523.0  | 523.0  | 523.0  | 523.0  | 523.0  | 523.0  | 523.0  |
| 2.5°  | 529.9  | 529.9  | 528.5  | 528.5  | 525.7  | 524.4  | 523.0  | 523.0  | 521.6  | 521.6  | 520.2  |
| 5°    | 532.7  | 532.7  | 532.7  | 531.3  | 529.9  | 528.5  | 525.7  | 523.0  | 521.6  | 520.2  | 518.8  |
| 7.5°  | 534.1  | 534.1  | 532.7  | 532.7  | 531.3  | 529.9  | 525.7  | 521.6  | 520.2  | 518.8  | 518.8  |
| 10°   | 545.3  | 543.9  | 542.5  | 539.7  | 539.7  | 539.7  | 534.1  | 529.9  | 528.5  | 528.5  | 528.5  |
| 12.5° | 571.8  | 570.4  | 567.6  | 563.4  | 563.4  | 564.8  | 556.4  | 550.9  | 550.9  | 549.5  | 549.5  |
| 15°   | 610.8  | 609.4  | 606.6  | 599.7  | 598.3  | 601.1  | 588.5  | 582.9  | 582.9  | 582.9  | 581.5  |
| 17.5° | 654.0  | 651.3  | 647.1  | 641.5  | 641.5  | 641.5  | 628.9  | 622.0  | 617.8  | 617.8  | 616.4  |
| 20°   | 690.3  | 688.9  | 688.9  | 687.5  | 691.7  | 691.7  | 675.0  | 663.8  | 654.0  | 648.5  | 647.1  |
| 22.5° | 722.4  | 721.0  | 723.8  | 729.4  | 737.7  | 740.5  | 721.0  | 704.3  | 688.9  | 677.8  | 675.0  |
| 25°   | 765.6  | 764.2  | 762.8  | 771.2  | 785.1  | 789.3  | 768.4  | 747.5  | 732.1  | 726.6  | 723.8  |
| 27.5° | 811.6  | 813.0  | 814.4  | 822.8  | 833.9  | 840.9  | 820.0  | 800.5  | 787.9  | 779.6  | 776.8  |
| 30°   | 863.2  | 866.0  | 870.2  | 882.8  | 891.1  | 893.9  | 875.8  | 861.8  | 850.7  | 843.7  | 839.5  |
| 32.5° | 928.8  | 934.4  | 939.9  | 951.1  | 955.3  | 952.5  | 944.1  | 934.4  | 926.0  | 916.2  | 914.8  |
| 35°   | 1026.4 | 1032.0 | 1030.6 | 1034.8 | 1036.2 | 1033.4 | 1029.2 | 1023.6 | 1019.4 | 1006.9 | 1005.5 |
| 37.5° | 1149.1 | 1154.7 | 1146.3 | 1142.1 | 1132.4 | 1133.8 | 1132.4 | 1136.6 | 1138.0 | 1125.4 | 1124.0 |
| 40°   | 1273.2 | 1278.8 | 1267.7 | 1256.5 | 1246.7 | 1242.6 | 1249.5 | 1263.5 | 1263.5 | 1255.1 | 1255.1 |
| 42.5° | 1405.7 | 1409.9 | 1391.8 | 1377.8 | 1365.3 | 1362.5 | 1366.7 | 1383.4 | 1387.6 | 1386.2 | 1386.2 |
| 45°   | 1538.2 | 1535.4 | 1511.7 | 1497.8 | 1486.6 | 1479.6 | 1481.0 | 1493.6 | 1501.9 | 1506.1 | 1506.1 |
| 47.5° | 1640.0 | 1635.8 | 1616.3 | 1605.1 | 1598.2 | 1588.4 | 1588.4 | 1595.4 | 1599.6 | 1601.0 | 1601.0 |
| 50°   | 1720.9 | 1716.7 | 1697.2 | 1695.8 | 1695.8 | 1691.6 | 1687.4 | 1686.0 | 1683.2 | 1684.6 | 1684.6 |
| 52.5° | 1790.6 | 1785.0 | 1771.1 | 1773.9 | 1786.4 | 1789.2 | 1783.6 | 1772.5 | 1761.3 | 1757.1 | 1758.5 |
| 55°   | 1865.9 | 1857.6 | 1846.4 | 1854.8 | 1879.9 | 1891.0 | 1882.7 | 1860.3 | 1840.8 | 1828.3 | 1828.3 |
| 57.5° | 1925.9 | 1916.1 | 1916.1 | 1939.8 | 1985.9 | 2008.2 | 1990.0 | 1948.2 | 1914.7 | 1900.8 | 1902.2 |
| 60°   | 1884.1 | 1875.7 | 1909.2 | 2013.7 | 2100.2 | 2137.9 | 2107.2 | 2033.3 | 1978.9 | 1962.1 | 1964.9 |
| 62.5° | 1801.8 | 1796.2 | 1838.0 | 1999.8 | 2203.4 | 2281.5 | 2235.5 | 2129.5 | 2048.6 | 2029.1 | 2029.1 |
| 65°   | 1680.4 | 1679.1 | 1737.6 | 1937.0 | 2227.1 | 2419.6 | 2380.5 | 2234.1 | 2129.5 | 2103.0 | 2108.6 |
| 67.5° | 1554.9 | 1554.9 | 1607.9 | 1829.7 | 2199.2 | 2478.1 | 2508.8 | 2328.9 | 2168.5 | 2103.0 | 2104.4 |
| 70°   | 1333.2 | 1356.9 | 1497.8 | 1730.6 | 2097.4 | 2436.3 | 2561.8 | 2262.0 | 1998.4 | 1882.7 | 1878.5 |
| 72.5° | 878.6  | 909.3  | 1189.6 | 1557.7 | 1997.0 | 2284.3 | 2312.2 | 1987.2 | 1659.5 | 1524.3 | 1517.3 |
| 75°   | 529.9  | 556.4  | 771.2  | 1216.1 | 1755.8 | 1839.4 | 1716.7 | 1557.7 | 1239.8 | 1133.8 | 1133.8 |
| 77.5° | 156.2  | 174.3  | 355.6  | 771.2  | 1214.7 | 1209.1 | 1058.5 | 917.6  | 733.5  | 623.4  | 631.7  |
| 80°   | 92.0   | 94.8   | 115.7  | 351.4  | 503.4  | 529.9  | 408.6  | 255.2  | 255.2  | 189.7  | 184.1  |
| 82.5° | 71.1   | 71.1   | 73.9   | 87.9   | 121.3  | 135.3  | 103.2  | 87.9   | 100.4  | 85.1   | 80.9   |
| 85°   | 50.2   | 50.2   | 50.2   | 51.6   | 53.0   | 54.4   | 57.2   | 58.6   | 64.1   | 53.0   | 50.2   |
| 87.5° | 15.3   | 16.7   | 18.1   | 20.9   | 25.1   | 26.5   | 27.9   | 25.1   | 25.1   | 23.7   | 22.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)